

## ABSTRACT OF THE DISCLOSURE

An optical printing apparatus capable of providing a high-quality image even on a photosensitive printing medium in which a chromophore (i.e., color-generating) density is nonlinear with respect to a quantity of exposure light. A chromophore density characteristic representative of the relation between a quantity of exposure light and a density is determined, and input image data represented by a first gradation is converted into corresponding exposure level data represented by a second gradation greater than the first gradation in accordance with the chromophore density characteristic. A print head is driven to expose the photosensitive printing medium according to the exposure level data, whereby there is obtained an image of a linear density with respect to the image data.